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The
**NATIONAL ASSOCIATION
of CORPORATION SCHOOLS**
Bulletin

25 Cents a Copy

\$2.00 For a Year

Volume III

September, 1916

Association Activities

**Chancellor McCormick Defines Educational
Needs**

**Mobilizing Trained Men for Commercial
Preparedness**

**Part Time Co-operative Work in
New York City**

By R. W. BURNHAM, Co-ordinator

**Part Time Vocational Work Succeeds
with Young Girls**

**PUBLISHED BY ORDER OF THE
EXECUTIVE COMMITTEE**

The National Association of Corporation Schools

Headquarters, Irving Place and 15th Street, New York City

Objects

Corporations are realizing more and more the importance of education in the efficient management of their business. The Company school has been sufficiently tried out as a method of increasing efficiency to warrant its continuance as an industrial factor.

The National Association of Corporation Schools aims to render new corporation schools successful from the start by warning them against the pitfalls into which others have fallen, and to provide a forum where corporation school officers may interchange experiences. The control is vested entirely in the member corporations, thus admitting only so much of theory and extraneous activities as the corporations themselves feel will be beneficial and will return dividends on their investment in time and membership fees.

A central office is maintained where information is gathered, arranged and classified regarding every phase of industrial education. This is available to all corporations, companies, firms or individuals who now maintain or desire to institute educational courses upon becoming members of the Association.

Functions

The functions of the Association are threefold: to develop the efficiency of the individual employee; to increase efficiency in industry; to have the courses in established educational institutions modified to meet more fully the needs of industry.

Membership

From the Constitution—Article III.

SECTION 1.—Members shall be divided into three classes: Class A (Company Members) Class B (Members), Class C (Associate Members).

SECTION 2.—Class A members shall be commercial, industrial, transportation or governmental organizations, whether under corporation, firm or individual ownership, which now are or may be interested in the education of their employees. They shall be entitled, through their properly accredited representatives, to attend all meetings of the Association, to vote and to hold office.

SECTION 3.—Class B members shall be officers, managers or instructors of schools conducted by corporations that are Class A members. They shall be entitled to hold office and attend all general meetings of the Association.

SECTION 4.—Class C members shall be those not eligible for membership in Class A or Class B who are in sympathy with the objects of the Association.

Dues

From the Constitution—Article VII.

SECTION 1.—The annual dues of Class A members shall be \$100.00.

SECTION 2.—The annual dues of Class B members shall be \$5.00 and the annual dues of Class C members shall be \$10.00.

SECTION 3.—All dues shall be payable in advance and shall cover the calendar year. New Class A members joining between January 1st and April 1st, shall pay first year's dues of \$100.00; those joining between April 1st and July 1st, shall pay nine months' dues or \$75.00; those joining between July 1st and October 1st, shall pay six months' dues or \$50.00; those joining between October 1st and December 31st shall pay three months' dues or \$25.00, but for subsequent years shall pay full dues of \$100.00. Any members in arrears for three months shall be dropped by the Executive Committee unless in its judgment sufficient reasons shall exist for continuing members on the roll.

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The National Association of Corporation Schools

Bulletin

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Edited by F. C. Henderschott, Executive Secretary

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WHERE THE EDUCATIONAL STATISTICS COME FROM

During the past few months many statements have appeared in print purporting to give data in support of figures concerning the public school system of the United States.

Being unable to trace these figures to authoritative sources the editor of the BULLETIN took up this question with Mr. William T. Bawden, Specialist in Industrial Education of the United States Bureau of Education. Under date of July 24th Mr. Bawden writes as follows:

"The question of elimination of pupils from schools, raised in your letter of June 27th, is one of the most important as well as one of the most difficult questions with which school administrators have to deal. The Bureau of Education has no figures that will give the number of pupils entering the public schools who graduate from the elementary school, who enter high school, or who enter college, etc.

"At the present time it will be physically impossible to secure such information for the United States, since only an inconsiderable fraction of our cities maintain records from which such data could be secured. As had been pointed out in some of the studies that have been made, the facts that are really necessary for the deduction of such conclusions are the school histories of children in such form as to give the facts concerning individual children from the ages of six years to eighteen years. The amount of study and investigation would be enormous.

"As you are probably aware, most of the statements that have been made in recent years on this subject are estimates, and are based upon a study of "Laggards in our Schools," by Dr. Leonard P. Ayres, of the Russell Sage Foundation, New York City, and a number of subsequent investigations which were inspired by this one. There are several chapters dealing with "Elimination of Pupils from Schools," "Promotion: Retardation

and Elimination," etc., in "Educational Administration," by Professors Strayer and Thorndyke of Columbia University, published by Macmillan."

This information is published that BULLETIN readers may have a clear understanding of where the data come from which concern the mortality of our educational system.

It must be remembered, however, that the situation is changing from year to year and in most communities the changes are for the better.

In the State of Washington, Mrs. Josephine Preston, State Superintendent of Schools, in a recent interview claimed that 64 per cent of the children in that State go to high schools. Mrs. Preston does not claim that all of the 64 per cent graduate from the high schools, but, allowing for normal conditions in this respect, the situation in the State of Washington is most encouraging. What can be done in that State can be done in other States.

The high school is the very bulwark of American civilization, and the greater the percentage of our children who enter this institution, the greater will be the efficiency of our nation.

EDUCATIONISTS AND PSYCHOLOGISTS FIND A COMMON MEETING-GROUND

In the August issue of the BULLETIN, at the close of the leading editorial of that issue, appears this paragraph:

"Somewhere there is a meeting ground as between the work of Dean Schneider and the work of the psychologists. Business will profit in a large measure when this point has been determined."

Scarcely had the issue been published containing the above statement, before there was laid on the editor's desk a new book, "Vocational Psychology," the work of Dr. Harry L. Hollingworth, of Columbia University.

In the editorial from which we quoted, it will be recalled that Dr. Hollingworth was mentioned as being among the ablest of the psychologists who are attempting the application of psychology to industry.

Dr. Hollingworth's book is timely. The first chapter is concerned with a review of educational conditions. The author dismisses the subject with this statement:

"With the vocational surveys, the industrial schools, and the part-time practice methods of education we shall not be concerned, in what is to follow. They represent a movement

of tremendous social and educational significance, but their development does not immediately concern that other field of work which we have designated 'vocational psychology.' They proceed mainly by giving the individual a knowledge of the external series of facts and events, thus replacing the era of fortune-telling and clairvoyance, with its search for signs and omens, just as fortune-telling had, in its own day, replaced the practices of crude objective magic. But the methods of industrial and occupational training have been found to solve only one aspect of the vocational problem; and it is more and more coming to realize that a thorough understanding of the aptitudes which the individual brings to his work is as important as the knowledge of the opportunities which the environment affords."

Having turned his attention to a search of the principles of that which is basic in vocational study, he summarizes the contentions of the phrenologist as follows:

"What discoveries may be in store for us we do not know. But the important point in the present connection is that, for the purposes of vocational psychology, the practices of phrenology are based on evidence no more relevant to its pretensions than were the 'proofs' pointed to by palmistry, horoscopy, and pre-natal magic. Through cranial measurements alone it is impossible to determine with certainty the race, age, or sex of an individual, or even, indeed, whether he was a prehistoric savage, an idiot or a gorilla."

Next taking up physiognomy, a careful résumé, thoroughly analyzed, is given with the following summary:

"We must content ourselves on this point by insisting that the formulated facts of physiognomy are so unsupported, contradictory, and extravagant that the vocational psychologist cannot afford to trifle with them. General impressions on the basis of the totality of an individual's appearance, bearing, and behavior we shall always tend to receive. The physiognomic analyses, then, do not merit serious consideration as instruments of vocational guidance and selection. The mere fact of physical structure, contour, shape, texture, proportion, color, etc., yield no more information concerning capacities and interests than did the incantations of the primitive medicine-man or the absurd charts of the phrenologist. In so far as character and ability may be determined by facts of structure, it is by the minute structure of the microscopic elements of the brain and other vital tissues about which we know exceedingly little. We shall, therefore, dismiss from further consideration the futile attempts to diagnose men-

tal constitution on the basis of bodily structure, and turn to the more reliable and scientifically conceived methods of inferring the individual's mental traits from his behavior or his actual performance, which tests are made under controlled conditions."

The balance of the book is devoted to a record of the development of psychological tests; what has been done in this field, in the knowledge of the author, and what results have been obtained.

It is an excellent book and worthy of careful reading by all who are interested in the subject of vocational placement.

When the editor of the BULLETIN predicted that some day the work of Dean Schneider and the work of the modern psychologists would find a meeting ground, there was no realization that this meeting ground was so near at hand, but the statement of Dr. Hollingworth that:

"We shall therefore dismiss from further consideration the futile attempts to diagnose mental constitution on the basis of bodily structure, and turn to the more reliable and scientifically conceived methods of inferring the individual's mental traits from his behavior or his actual performance when tests are made under controlled conditions," indicates that actual test of behavior made during the working period is the most promising field of the psychologist, bringing psychological effort into the same field which Dean Schneider has determined is the most promising from the point of educational efforts.

THE CAUSE OF GERMANY'S AND JAPAN'S INDUSTRIAL DEVELOPMENT

From an editorial in the *Saturday Evening Post* we learn that one reason for the astonishing industrial expansion of Germany in the last half of the nineteenth century was that Germany planned her expansion so as to start with a clean slate, taking over from other countries the model industrial systems ready made, and thus was able to cut out most of the deadwood, which every human institution accumulates in its evolution.

The writer continues to explain his subject as follows:

"In the middle of the nineteenth century Germany was an agricultural and, industriously speaking, almost a medieval country. Serfdom and the legal obligation upon workmen to join guilds had but recently been abolished. Industrial workmen in Prussia were calculated at less than 3 per cent of the population and only 28 per cent of the population lived in towns. The

number of steam engines within the boundaries of the tariff union which preceded the empire was under five hundred. Total exports were estimated at a hundred and twenty-five million dollars a year. Production of coal was under six million tons. Of the small amount of iron consumed, over half was imported from England. The Prussian Post Office in the course of a year handled only a letter and a half for each inhabitant.

"The advance from that state to antebellum Germany running neck and neck commercially with Great Britain and the United States comprises the most remarkable business expansion in history. In taking over the modern industrial system, Germany—and Japan was in the same case—could accept what she wanted and reject what she did not want. A nation that evolves a system on its own soil is not so advantageously situated. The deadwood accumulates as the live timber grows. To cut out the former and keep the latter is difficult. This applies to material things.

"For example, a new open-hearth process of making steel may be superior to the old Bessemer process; but a great deal of capital is invested in the old process, so it will give place to the new and better process but slowly. This is even more true, perhaps, of immaterial things. Customs and laws that were useful in their day hang on after their day of real usefulness is past.

"Some hopeful persons believe that this war will, to an extent, give Europe a clean slate and permit the cutting out of much deadwood which would have disappeared but slowly under normal conditions."

A TRAINING SCHOOL FOR SECRETARIES OF CIVIC BODIES

One of the most promising developments, educationally, of the many new movements which have come into existence during the past two or three years is the school for training Chamber of Commerce's Secretaries and secretaries of similar organizations, which held its second annual term at Glenwood on Cayuga Lake, the latter part of July and the early part of August.

This school was founded last year by the American City Bureau, and while the attendance last year was but fifteen, during the recent term eighty-two secretaries enrolled and took the course.

It is of great importance that the municipalities of this country should be efficiently managed and the activities, which are governmental in character and for which the taxpayers con-

tribute their annual sums, should be well organized and efficiently carried on.

This movement promises just this result. Such topics as garbage disposal, fire protection, sewerage, efficient paving, proper housing, city planning and all of the many activities which a municipality has to carry on, were presented to the students, the enrolled secretaries of commercial bodies, by authorities on each of the subjects.

Quizzes were held and the possibility of the usefulness by a civic body of the functions of a Bureau of Municipal Research were discussed. The speaker who presented this subject claimed that the first and most important problem for a city to determine is a correct annual budget, and that the budgets usually prepared by the Bureaus of Municipal Research could be prepared with equal effectiveness by the Chambers of Commerce or other civic bodies.

The Executive Secretary of The National Association of Corporation Schools presented the subject of "The Educational Requirements of Modern Industry." The discussion which followed this address indicates that the civic bodies in many municipalities will shortly undertake a survey for the purpose of determining a basis for a revision of the educational systems of these municipalities, realizing that no municipality can gain and maintain a higher standard of civic and industrial life than the educational system of that municipality will sustain.

A COLLEGE EDUCATION FOR EVERYONE

A movement which promises much in increasing educational efficiency was organized in Massachusetts last year, and has now developed to a point where it is receiving consideration by the authorities of several States.

Accounts of this movement have appeared in the *BULLETIN* with comment, both as to the importance of the movement as a method of getting education to the people who must work for their living, and as a possible solution of bringing the so-called "higher education" to those who in the past have been beyond the reach of this method of training.

At a recent meeting of the Massachusetts School Administrators, held under the auspices of the State Board of Education, Mr. J. A. Moyer, State Director of University Extension, outlined this correspondence method which Massachusetts has developed and which promises to bring the university courses directly to the worker.

In explaining the beginnings of the new system of State university extension, he said that students have now been enrolled about five months, and correspondence courses are now well established. This method of instruction was the first to be announced because in this way large numbers of prospective students could be reached in all parts of the Commonwealth, including those who wanted general, industrial, and commercial subjects as well as those of a college grade. This method of instruction seemed most adaptable for finding out the educational needs of those for whom this new form of education was provided. The number of students taking extension courses this summer is about 1,500, which is nearly twice the number estimated for this time in the budget submitted to the Ways and Means Committee of the Legislature, when an increased appropriation was voted last March.

A method of instruction in correspondence-study groups has been developed recently by the department. When not less than ten students enroll together in the same course and agree to meet regularly once a week for mutual helpfulness, they become a study group, and if there is an average attendance of eight students at the meetings, the department arranges to send an instructor to meet with them once a month.

Still more recently, regular class instruction has been introduced. By this method many of the courses offered by correspondence will be given to classes when not less than twenty students can be enrolled. In cities and the larger towns where classes can be easily organized, the class method will be encouraged in preference to correspondence because it is usually more economical, more direct, and in many cases more efficient. For the students in rural districts and in advanced or technical subjects, the correspondence system must necessarily continue its usefulness.

The State appropriation for this year is sufficient to provide instruction for 2,200 students. About 1,500 are already enrolled, so that less than 700 new students can be received next fall, when large numbers will want to enroll.

The State, according to Mr. Moyer's outline, will have two administrative centers for the university-extension work—one at the State House, and the other at Amherst Agricultural College. The local center will serve eastern Massachusetts, and the western the Connecticut Valley. The institutions in the western part—Smith, Mount Holyoke, Amherst, Amherst Agricultural and the International Y. M. C. A. at Springfield—will be drawn

upon for instruction, just as in the eastern part the colleges about Greater Boston furnish the instructors for the university-extension courses started by the Lowell Foundation. There, as here, the cost will be slight.

Through the State, moreover, there will be nine centers for extension classes, and numerous extension centers to be taught by circuit instructors, or by correspondence. Another feature is training schools for immigrants.

Mr. Moyer considers that under the new system, the people of the small towns will be able to get higher education practically free.

Educational authorities are watching the development of this movement by Massachusetts in the belief that similar movements may be inaugurated in other States.

It is quite possible that, in time, the States generally will recognize the efficiency of the correspondence methods of education and will assume the functions which, in the past, have been carried on by private institutions. The States can render their citizens no greater service.

WATER WILL FIND ITS LEVEL—A NATURAL LAW

In connection with efforts to fit the boy to the job, it is interesting to review how some of our railroad presidents started life.

B. F. Yoakum began as a rodman in a survey crew. Howard Elliott, President of the New Haven, began in the same way.

Theodore P. Shonts, President of the Interborough Rapid Transit Company of New York, began by sweeping the floor of a bank out in Iowa each morning and doing other odd jobs about the bank.

W. H. Truesdale was a freight-house clerk and almost despaired of ever being promoted.

B. F. Bush, President of the Missouri Pacific and other railroads, came up from the bottom.

A. E. Stillwell, who built a railroad from Kansas City to the southwest without the aid of Wall Street, was a printer.

Henry U. Mudge, President of the Denver and Rio Grande Railroad, was a laborer in the track department.

The story of J. J. Hill is too familiar to need repeating, and so the list might be continued.

We cannot disregard the natural law, that water finds its level. In this day, any boy, who has his health and *desires* an education, can succeed.

ASSOCIATION ACTIVITIES

Complete List of Sub-Committees—Outline Suggesting Plans for Conducting Annual Convention—Discussion of the New Plan for Carrying on the Associations' Activities

Below will be found a complete list of the sub-committees which have been appointed by President Tily and confirmed by the Executive Committee. It will be noted that the following new committees have been added: Publications, Local Chapters, Administration and Supervision of Corporation Educational Work, Educational Methods in Corporation Schools and Corporation Continuation Schools.

The Committee on Codification was discontinued for the present year, as conditions do not require such a committee.

The word "advertising" has been omitted from the Committee on Selling and Distribution Schools and the word "accounting" has been omitted from the Committee on Office Work Schools.

Trade Apprenticeship Schools

- F. W. THOMAS, *Chairman*,
Atchison, Topeka & Santa Fe
Railway,
Topeka, Kan.
- L. E. ABBOTT,
Oregon Short Line Railroad,
Salt Lake City, Utah.
- C. E. BILTON,
The Standard Mfg. Company,
Bridgeport, Conn.
- PAUL V. FARNSWORTH,
Cadillac Motor Car Company,
Detroit, Mich.
- THOMAS G. GRAY,
Southern Pacific Company,
Sacramento, Cal.
- J. W. L. HALE,
Massachusetts Board of Educa-
tion,
Boston, Mass.
- J. M. LARKIN,
Fore River Shipbuilding Corpo-
ration,
Quincy, Mass.
- J. H. YODER,
The Pennsylvania Railroad Com-
pany,
Altoona, Pa.

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New York University,
New York N. Y.
- F. W. ATKIN,
National Cash Register Com-
pany,
Dayton, Ohio.
- O. B. CARSON,
American Optical Company,
Southbridge, Mass.
- M. T. COPELAND,
Harvard Business School,
Cambridge, Mass.
- ALEXANDER FLEISHER,
Metropolitan Life Insurance
Company,
New York, N. Y.
- FRANK L. GLYNN,
Box 246,
Madison, Wisconsin.
- N. A. HAWKINS,
Ford Motor Company,
Detroit, Mich.
- WINSLOW JUDSON,
American Tobacco Company,
New York, N. Y.
- W. W. KINCAID
The Spirella Company,
Meadville, Pa.

J. T. SPICER,
Thomas Maddock's Sons Com-
pany,
Trenton, N. J.

Public Education

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Norton & Norton Grinding
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Worcester, Mass.

E. G. ALLEN,
Cass Technical High School,
Detroit, Mich.

T. M. AMBLER,
The Brooklyn Union Gas Com-
pany,
Brooklyn, N. Y.

ARTHUR E. CORBIN,
Packard Motor Car Company,
Detroit, Mich.

ARTHUR W. EARLE,
Winchester Repeating Arms
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MISS HARRIET FOX,
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Philadelphia, Pa.

Unskilled Labor

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Ambridge, Pa.

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Akron, Ohio.

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Chicago, Ill.

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New York, N. Y.

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graph Company,
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Chicago, Ill.

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Cleveland, Ohio.

W. K. PAGE,
Addressograph Company,
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C. B. AUDEL,
Westinghouse Elec. & Mfg. Com-
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East Pittsburgh, Pa.

L. H. BURNETT,
Carnegie Steel Company,
Pittsburgh, Pa.

H. HEINZ,

H. J. Heinz Company,
Pittsburgh, Pa.

J. C. LYNCH,

Bell Telephone Company of Pa.,
Philadelphia, Pa.

ARTHUR T. MOREY,

Commonwealth Steel Company,
St. Louis, Mo.

J. C. ROBINSON,

The New York Edison Company,
New York, N. Y.

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Corporation Continuation Schools

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Western Electric Company, Inc.,
Chicago, Ill.

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International Harvester Com-
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Brighton Mills,
Passaic, N. J.

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New York, N. Y.

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Educational Methods in Corpo- ration Schools

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Urbana, Ill.

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Midvale Steel Company,
Philadelphia, Pa.

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Southwestern Bell Telephone
Company,
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The Trow Press,
New York, N. Y.

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Westinghouse Air Brake Com-
pany,
Wilmerding, Pa.

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The Prudential Insurance Com-
pany of America,
Newark, N. J.

R. C. WARNER,
Standard Oil Company of Cali-
fornia,
San Francisco, Cal.

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J. W. DIETZ,
Western Electric Company,
Chicago, Illinois.

LEE GALLOWAY,
New York University,
New York, N. Y.

H. M. ROWE,
H. M. Rowe Company,
Baltimore, Md.

H. J. TILY,
Strawbridge & Clothier,
Philadelphia, Pa.

Local Chapters

JOHN MCLEOD, *Chairman*,
Carnegie Steel Company,
Pittsburgh, Pa.

D. R. STEVENS,
The Goodyear Tire & Rubber
Company,
Akron, Ohio.

KENDALL WEISIGER,
Southern Bell Telephone Com-
pany,
Atlanta, Ga.

H. M. ROWE,
The H. M. Rowe Company,
Baltimore, Md.

J. M. LARKIN,
Fore River Shipbuilding Com-
pany,
Quincy, Mass. (Boston Chap-
ter).

C. E. BILTON,
The Standard Mfg. Company,
Bridgeport, Conn.

WILLIAM R. DEFIELD,
Montgomery Ward & Company,
Chicago, Ill.

KENNETH W. REED,
The Warner & Swasey Company,
Cleveland, Ohio.

MISS LILIAN MEYNCKE,
The Rike-Kumler Company,
Dayton, Ohio.

ROBERT B. BONNEY,
The Mountain States Telephone
& Telegraph Company,
Denver, Colo.

F. H. DODGE,
Burrhoughs Adding Machine
Company,
Detroit, Mich.

LEE GALLOWAY,
New York University,
New York, N. Y.

JOHN L. CONOVER, JR.,
Public Service Corporation of
N. J.
Newark, N. J.

ROBERT C. CLOTHIER,
The Curtis Publishing Company,
Philadelphia, Pa.

C. R. DOOLEY,
Westinghouse Electric & Mfg.
Company,
East Pittsburgh, Pa. (Pitts-
burgh Chapter).

L. W. GEORGE,
Commonwealth Steel Company,
St. Louis, Mo.

Membership Committee

HERBERT J. TILY, *President*,
Strawbridge & Clothier,
Philadelphia, Pa.

F. C. HENDERSCHOTT, *Secretary*,
The New York Edison Company,
New York, N. Y.

Utilizing Local Chapters Commit-
tee members in so far as possible
and working directly with our
membership otherwise.

By reference to the chart printed on the page opposite this article it will be noted that the line-and-staff form of organization has been adopted as the best method under which to conduct the activities of our Association. Under this form of management all of the officers have active duties to perform. The full machinery of our Association is put into operation, and it is believed that the results will be most beneficial.

New Plan for Annual Convention

The Program Committee, in working out the plan which has been adopted by the Executive Committee and under which the activities of our Association will be carried on, also gave consideration to a plan for conducting the fifth annual convention which will be held at Buffalo June 5th, 6th, 7th and 8th next year.

It is proposed to have general problems considered on the first day of the convention. Under this classification would come reports from the committees on Vocational Guidance, Employ-

ment Plans, Safety and Health, and Administration and Supervision of Educational Methods in Corporation Schools. These reports would all be discussed in the forenoon. In the afternoon would be a series of round tables covering the reports of the forenoon, and in the evening round table discussions might be continued.

On the second day of the convention industrial problems would be considered. The same plan as outlined for the first day would be followed except that under this heading would come reports of the Committee on Trade Apprenticeship Schools, Special Training Schools and Unskilled Labor.

The third day would be given over to commercial problems. Under this heading would fall the reports of the Committees on Selling and Distribution Schools, Retail Salesmanship, Office Work Schools and Continuation Schools.

On the fourth and last day the morning session would be devoted to Association problems. In addition to the annual election of officers and the annual business meeting the reports of the Committees on Public Education, Allied Institutions, Local Chapters and the Committee on Publications would be submitted and discussed. The afternoon would be given over to entertainment as in the past.

Under this plan each afternoon would be devoted to round-table discussions of the reports of the committees which had been submitted at the morning sessions, and the evenings would also be open for conferences and discussions. This plan has not yet been adopted; in fact, the Executive Committee has not as yet considered it. However, the Executive Committee is always glad to be kept advised of the wishes of members, and publicity is given to the plan at this time for the purpose of acquainting members with the plan and giving them opportunity for making suggestions, and to voice their approval or disapproval, as the case may be.

It is also believed that round tables should be confined to a concrete discussion of the reports.

Points which seem most desirable and which are emphasized are:

First, promptness in starting meetings.

Second, keeping to the point.

Third, avoiding parallel sessions, as many members are interested in all the sessions.

Fourth, opportunity for discussion in small groups and private conferences in addition to round-table discussions.

A Discussion of the New Plan for Carrying on Association Activities

In the August issue of the BULLETIN appeared the instructions which the Executive Committee has issued to the chairmen of the sub-committees. Briefly, these instructions are:

First, that the entire year's activities are planned to bear directly on corporation educational problems.

Second, chairmen are requested to analyze the Proceedings of all the past annual conventions and the BULLETINS which have been issued with a view to

(a) making a comprehensive compilation of the subjects which have been discussed and upon which agreements were reached;

(b) and avoiding continued discussion of these subjects by pointing out to new members the particular place in the proceedings or BULLETIN where the discussions may be found;

(c) to compile a list of questions still open to debate or new ideas, either in the experimental stage or not yet discussed. Chairmen of sub-committees are requested to list these subjects for discussion, the object of the plan being to make the work of our Association constructively progressive.

Third, to determine in so far as possible:

(a) What others are doing.

(b) What the members of our Association can and should be doing educationally.

Fourth, emphasis in the work of our Association to the present time has been laid on the preparation of the *new* employe.

Should we not take up the study of plans for developing *old* employes and the matter of following up graduates of our educational work through extension plans?

The Executive Committee would welcome suggestions and criticisms from our members.

Proceedings of the Pittsburgh Convention

Publication of the Proceedings of the Pittsburgh Convention has been somewhat delayed by members not returning promptly the stenographer's minutes of their discussions at the convention. It is hoped, however, to have the Proceedings in the hands of all of our members early in October.

Republishing of Committee Reports

The reports of the Committee on Vocational Guidance, Office Work Schools and Employment Plans have all been republished, and copies of these reports ordered by our members have been forwarded to them. The reports of the sub-committees to the Pittsburgh Convention have been found very valuable, and members are making use of these reports to a much greater extent than during previous years.

Membership Campaign

In the early fall a campaign will be undertaken to extend the Class "A" membership of our Association among the industrial institutions through the United States. Inquiries indicate that a considerable number of new members will be gained. In several sections of the country, notably in Detroit, Buffalo, Chicago and St. Louis, and a few other points, plans are under way for local campaigns to increase membership.

A campaign for Class "B" memberships will also be undertaken. There are many instructors and others interested in educational problems who are connected with our Class "A" members, but who have not taken Class "B" memberships. It is hoped to correct this condition in the near future.

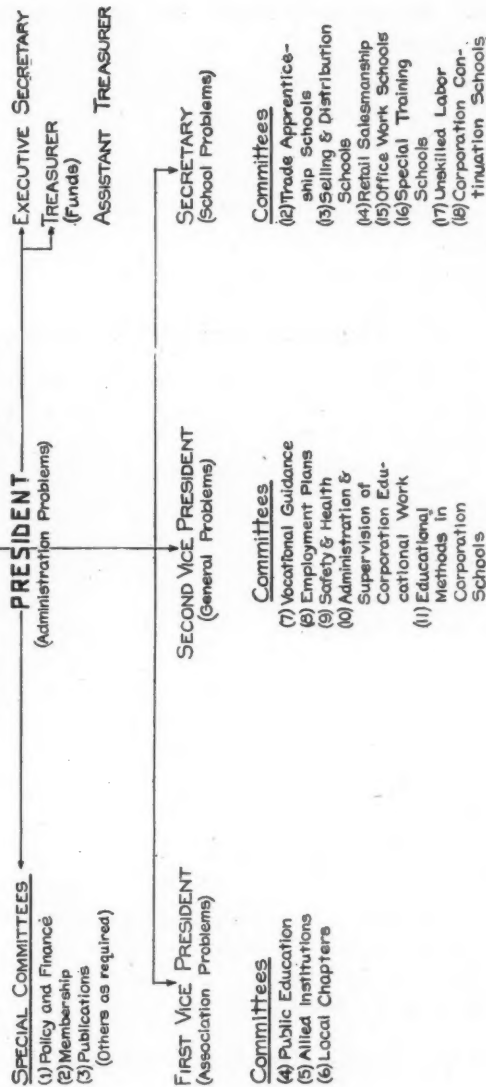
A Word About the New Committees

In determining the sub-committees every effort was made to secure a representative of as many of the Class "A" members as possible. Nearly the entire one hundred and two Class "A" members are represented on some one of the sub-committees. It is the desire of President Tily to give representation on the committees wherever requested, and if any of our Class "A" members would like to have representation on any of the committees they should communicate with President Tily regarding the matter.

Local Chapters' Committee

This is a new Committee which grew out of a suggestion contained in ex-President McLeod's annual address. Mr. McLeod was made chairman of the new Committee and already has sent out a letter containing a draft of the proposed work which this Committee will undertake.

MEMBER COMPANIES EXECUTIVE COMMITTEE (Advisory and General Supervision)



CHANCELLOR McCORMICK DEFINES EDUCATIONAL NEEDS.

Through An Alliance of Various Educational Institutions We Shall Arrive at a Finer and More Rational System of Education

In an address before the Fourth Annual Convention of our association at Pittsburgh, Chancellor McCormick, of the University of Pittsburgh, clearly defined what agencies will play an important part in the future developments of the educational system of the United States. This address will appear in the proceedings of the convention, but it is worthy of greater publicity, and is therefore here given in full:

Chancellor McCormick's Address

We should remember that the principle of education as it has been developed in our country is that it proceeds from the top downward and never from the bottom up. Before there were any other schools in this country, Harvard College, now Harvard University, was founded; and the whole development of our educational system, as is, indeed, historically the case in all countries and in all ages, has been from the higher downward, so that not alone in the matter of preparing teachers, as our universities are doing, but in the matter of intelligent direction of educational movements, we must depend very largely upon our universities.

In Pittsburgh we are attempting in our Evening School of Economics and along other lines to do very much the same kind of service which is illustrated in the paper as being done by the New York University.

Now, having said this much, I wish to say just three things, and those three things are these: Through this alliance of the various educational institutions and agencies mentioned, I think that we shall arrive at a finer and more rational system of education, at a larger efficiency in our education, and at a better understanding all through our educational and industrial life.

The Rationality of Our Educational System

First, as to the rationality of our educational system: It has been, of course, historically in our country a development very largely along academic lines; and the idea of causing education to issue in a larger efficiency, except of mere mental efficiency,

has not developed until recent times. I have no fear whatever that the movement will result in what is materialistic rather than spiritual in its character, for it is not what is taught nor what is learned, but it is the spirit in which things are taught and in which things are learned which results in what we call character.

In dealing with these problems with a view to larger industrial efficiency, we need not fear that our young people will be commercialized and the quality of our citizenship impaired, unless we choose deliberately to do this thing. It is quite possible to direct our education so that it will result in the largest efficiency, and at the same time carefully guard against any possible danger of lowering the standard and the high aim of all education. In so doing we shall, I am sure, ultimately arrive at a much more sensible, more rational, more effective education in our entire system of instruction. The continual interchange of opinion, of bringing together the various elements in our social, educational and industrial units, cannot but result in great advantage, material and educational, to every part of our country. I fail utterly as a prophet unless, as a result of the Corporation Schools movement and the calling in of these other institutions to consult and co-operate, there will be finally a very much more rational system of instruction throughout the country, meeting much more perfectly the varied needs of the youth of America.

The Larger Efficiency

My second thought is larger efficiency; and this, I am quite sure, appeals to all of us. It is a perfectly proper thing that a boy receiving the training of the schools shall have something to show for it in his life, apart from the possession of a certain set of facts and of a certain mental discipline. He ought also to have a certain increased skill; a modicum, at least, of ability to do things.

Of course we understand that all education is primarily with a view to the making of a man, to the production of character; that the residuum of all the educational process is in the creation of something which did not exist before. Yet we are also to remember that a part of this residuum should be larger efficiency on the part of the young man and woman; a greater capacity to accomplish results, to do things; especially in a country like ours, which is still in process and which must make long and steady advancement before its development will be

complete. One, at least, of the effects of this interchange between this organization and the allied schools will be this larger efficiency, without any lessening of the efficiency of the school in the production of manhood and womanhood. Efficiency and spiritually, achievement and character, are not opposites but concomitants. An educational system worthy the name should produce both, and both in largest measure.

The Corporation School Movement

A third important result of the Corporation School movement in connection with the allied institutions will be a larger and better understanding and a larger and more perfect sympathy between employer and employe. Nothing in our national life is more fundamental, more vitally important than just this. Fallacies, wrong theories, bad practices exist in industry, in education, in every part of our national life, involving the social well-being of the people of the entire nation. If in any period it has been desirable that these fallacies, wrong theories, misunderstandings should be completely eliminated, that time is now.

I know of nothing more important than that the man who employs shall understand sympathetically the man who does the work; and that the man who does the work shall understand sympathetically the problems of the man and of the organization which is employing him. Important as it is to know things and people, it is still more important to understand things and people. Germany knows more about all of the other nations of the world than perhaps the particular nation knows about itself; but I sometimes think, as I look at events, that Germany understands less about these other nations than any other nation in the whole sisterhood of nations. To know things is not necessarily to understand and appreciate them.

Bringing the Relationships Together

Now, when we get together in all these relationships; when these different educational agencies talk with one another, work together, get to know the problems of each, each contributing something to the general result, there will of necessity come an understanding of the whole problem which will result in great benefit. When these men who are planning and doing the work get a new fact, a new idea, a new vision, a new inspiration, there is put into the great body a new element which will be of infinite value in solving the problems which are arising and which will continue to arise for a good many years to come.

As a result, therefore, of these alliances, I am quite sure

that we shall ultimately work out a more rational system of education all through the educational processes; that we shall come into an immensely larger efficiency in education; and that we shall come into a more perfect understanding among all the elements of society and of industry and of education, with resulting benefit to the nation at large.

I want to say in connection with this matter, that what Mr. Burke told us this morning is absolutely true. It could not be too strongly stated.

National Efficiency the Result of Educational Efficiency

This matter of efficiency⁸ in America, a more efficient educational system, is not only desirable, but it is fundamentally necessary. We are shocked and appalled at the horrible loss of life in Europe, and it touches most men at those ages when the loss is greatest of all; but if we imagine for a single moment that that will affect the industrial development of Europe, and the commercial development of Europe, we are greatly mistaken. These nations have learned in military organization and efficiency what will be transferred over, when the war is ended, to industry and commerce. Even the burden of indebtedness and of poverty will be to them a marvelous incentive and a tremendous advantage. Unless we shall wake up, we may be left very, very far behind in the race for industrial, commercial and financial supremacy. This will be bad enough in itself; but in the fact that it will destroy the dream of America to be the world leader in extending the liberty, the opportunity, the blessedness of democracy to the peoples of the world, it will be infinitely worse.

The mission of America to the world is a mission of world well-being, and in order to accomplish it we must not be found lacking in education, in industry, in commerce, or in the character which is the chief product of them all.

NEW MEMBERS

Since the last membership statement appeared in the BULLETIN, the following new members have been received:

Class "A"

Paige-Detroit Motor Car Company, Detroit, Michigan,
Mr. C. S. Pike.

Class "C"

Mr. Paul Super, International Committee Y. M. C. A.,
New York, N. Y.

THE NEW YORK PUBLIC LIBRARY HAS NO EMPLOYMENT BUREAU

In the July issue of the BULLETIN appeared an article credited to the New Haven, Connecticut, *Union*, which described an Employment Bureau supposed to have been maintained by The New York Public Library.

Mr. E. H. Anderson, director of this institution, took exception to the article on the grounds that there is no employment bureau in The New York Public Library, but suggested that the writer doubtless had in mind the New York City Employment Bureau.

As the New Haven *Union* took occasion to poke fun at the application blanks which the applicants were asked to fill out, this statement is published to absolve The New York Public Library from the criticisms in which the *Union* indulged.

BOOKS RECEIVED

"Vocational Psychology"—Harry L. Hollingworth, Associate Professor of Psychology, Columbia University. Published by D. Appleton & Company.

VOCATIONAL COURSES AT IOWA STATE COLLEGE

For the young man who does not have a high-school education but who wants to go into industrial or engineering work, the engineering extension division of the Iowa State College has just announced series of vocational courses, beginning September 11th, that are unique. These courses, varying from five months to two years in length, are practical in nature, and are open to any one 17 years old who has completed the eighth grade. They are not open to graduates of accredited high schools.

For those interested in the motor car, there will be a course for automobile mechanics. Shop work and mechanical drawing will be taught also and the young man who has completed the course will be able to do successful work in a garage. A similar course, lasting a year, will be offered to telephone plant men.

The two-year courses for electrical workers, stationary engineers, structural draftsmen, building superintendents, surveyors and road makers, mechanical draftsmen and mechanics are offered, consisting of practical shop work, laboratory courses, and instruction in the essentials in each of these lines of industrial endeavor.

MOBILIZING TRAINED MINDS FOR COMMERCIAL PREPAREDNESS

A Description of Some Accomplishments During the Past Few Years in the United States and a Comparison With Other Countries

(From *The Americas*, published by the National City Bank of
New York.)

The commerce of the world after the war is over may be a merciless international battle of tariffs and political maneuver, or it may return to the keen, open competition of economical production and skillful cultivation of the world's markets of before the war; but whatever comes, we may be sure that carefully trained organization and scientific production are going to play a much more obvious part in business everywhere, domestic or foreign. Europe is getting ready to systematize the use of industrial training and practical science all through manufacturing and trade and much more universally than heretofore.

The movement is strong in England. At the notable session of the Imperial Parliament in January, at which the economic mobilization of the full strength of the Empire for the purposes of the war with Germany was sanctioned, a leading statesman-economist arose and delivered a speech that has set England talking and organizing for the purpose. The thing England must do, he said, if she would hold her place secure in the trade of the world, was to mobilize the technical science and the commercial knowledge of the whole country and use it every day in the country's industries, for Germany's industrial and political power came from the effective employment of trained technical skill all through the nation's business activities. Other leading Englishmen are now saying the same thing—calling upon England to better organize the mental equipment of her industries, to meet Germany's methodical use of intellect in industry.

Putting Scientific Knowledge to Use

And England has started out in an organized way to take the advice. A score of scientific societies have joined in a movement to bring out from pigeonholes and filing cabinets the scientific knowledge that can be made use of in manufacture and to get it into use. This organization is called the Conjoint Board of Scientific Societies. Also an Advisory Council for Scientific

and Industrial Research has been formed, with a membership in which institutions, leading individual scientists, men at the head of technical and other industries, engineers, and industrial experts are joined. This Council has raised money and accepted the exclusive services of some of the best specialists in industrial science and is conducting extensive research for the solution of certain specific problems relating to industry. There is much discussion also of general industrial education in the lower schools, but this is a matter in which accomplishment is always gradual. Whatever the rate of improvement, however, it can be said that England will hereafter have a stronger organization of the technical side of industry than in the past.

Where the United States Stands

Now it is of interest to see where we in America stand in relation to this important world-wide movement for efficiency and national prosperity through organized development of more skill and intelligence from the top to the bottom of the nation's producing forces. We have been in a notable speeding-up period. Our progress has been a bit uneven, because in one important part of the program we have made next to none at all. We have not yet adopted an American system of common-school education such as to bring American boys into our industrial system as beginners as well prepared to do for themselves and for their employers as the boys of the future will be able to do. But beyond this neglect of opportunity as a nation in our political management of economic affairs, American business enterprise is providing facilities that we need not be ashamed of, but of which the whole business community does not take full advantage. Business enterprise is developing every day new organized ways of putting brains into every phase of business. As an authority on the big subject said a few days ago, as a nation we do not lack facilities for putting the maximum of brains into national industry and trade so much as organization for putting to good use the facilities we have.

Our National Weakness

Our national weak point is in lack of facilities for the preliminary training of those who are to become the skilled workers in the ranks. A very large and productively important part of the people of the country are certain to devote their whole lives to manual work in business. This part of the people would be absolutely more prosperous and successful if our school systems

all over the country recognized the fact and trained boys and girls for the development of technical skill as workmen and as efficient managers of homes. In some parts of the country a splendid beginning is making in this very thing, but not in the parts where the big manufacturing is conducted. There, the few excellent schools are hardly counted in the big average.

Taking Germany's public and guild schools as a typical example, some of our most practical educators do not regard them as the best for this country, but point to them to show what can be done in a big, nation-wide system of education of the masses of a producing nation. The most plausible criticism of Germany's whole equipment of education for production, from bottom to top, is that it is too narrowly special for both individuals and all; a workman is trained to just one kind of work; a chemist is educated to one narrow specialty, for which reason, some say, Germany has one expert chemist, willing to work for a low salary, to every forty-four workmen in the great German dye factories. Men at the head of American concerns have said that this specializing makes a man too narrow to be a success in the wide competitive research work that is now a notable development in American industry. But the German way has made good in Germany, and to the industrial training in German schools is credited the high "industrial morale" of the German workman, the spirit of conscientious earnestness and ambition to acquire skill that begins in the school-boy. Some believe that the "American idea" for business education in the public schools will be a system of combined mental and manual training, in which "principles" of skilled workmanship will be inculcated—familiarity with materials, their properties, tools and typical handling of wood, metal, etc., with them, the atmosphere of shop and store—something like a liberal education for work as the present standard curriculum is for general culture. They think that the "industrial morale" will be trained into the boy by such a course. He will go into shop or store with a general business-like attitude already drilled into him, and he will understand so readily the reason in any new kind of mechanical workmanship as quickly to acquire skill. Such a training, it is said, leaves the whole broad range of opportunity to a boy and is a concession to the American feeling that every boy must aim for the top of the ladder. But this is all for the future—America now has no practical system of public education for boys so that they will get the best out of a workman's career, and because of this we have a margin of oppor-

tunity for expanding greatly the efficiency of the working forces of our industries.

Correcting Deficiencies in Training

Through the highly organized establishments of our great corporations, and among many smaller manufacturing and mercantile concerns, the deficiency of training among the raw young recruits is being systematically provided for in regular courses of schooling designed to improve morale, physique, and mental equipment. To get a comprehensive view of this splendid work and of the broad national spirit in which it is being carried on, one can read the proceedings of the three annual conventions held by The National Association of Corporation Schools. The papers, speeches and discussion will show how extensive the range is of America's scientific systematization of the knowledge that has come from our great intensive experience in the greatest domestic industrial field and market of the world. First, education of apprentices in co-ordination with the working of scientific management and industrial efficiency systems and technical instruction in mathematics, draughtsmanship, and the elementary science of electricity, chemistry, or whatever field they are working in, so as to give them intelligent skill and fit them to be foremen or even executives, for advanced courses are provided for the ambitious. Then, advanced courses for young engineers and graduates of technical schools who are working through the departments of factories and plants to get the "feel" of the mechanical side of their profession. Schools of salesmanship and experience conferences. Analysis of markets. Cost accounting systems. Training of minor executives. Scientific advertising and publicity. Research work. There are a round 100 corporations in the association. They represent close upon three billions of capital. There are about 300,000 employes directly reached by the educational organizations. And the association does not cover all the systematic educational work conducted by big business in America. We are not going to attempt to judge the quality of the technical education in the sciences applicable to business offered and supplied by the universities and technical institutes of this country. In some lines they are said to be unsurpassed anywhere. There is no big problem in higher technical education. The men who are fit for it obtain it. The practical question is, how is technical science applied in our industry. Our industries work very closely with good technical schools. Our professional societies,

of engineers, chemists, etc., are active. There is no other country that has technical journals of circulation and practical editorial quality such as ours. Washington is a national research and testing laboratory for practical industry.

How American Industries Are Profiting

The experiences of war-time have shown that the capital a number of our corporations began spending a few years ago in the current notable development of industrial research was very well invested. Our rubber and electrical companies could have been very badly crippled for want of certain materials had it not been for the laboratories, which found how to manufacture some and substitute for others in economical ways, and a few of which were able to organize quickly the manufacture in quantity of "intermediates" formerly purchased abroad. Before the war, in fact, this kind of thing, done on a large scale, was of proportions to fire the imagination. We had laboratories employing hundreds of men and formally incorporated carrying on the experimentation of independent inventors. The research departments of some of our corporations are as extensive as whole factories. It is not extraordinary to spend a million a year upon their work. They carry on persistent experimentation for the improvement of materials and to find how to cheapen production. One big corporation devotes the entire time and energies of a group of men to conduct an endless variation of experiments in combining alloys of metals in different proportions, in expectation of discovering a new combination of revolutionary qualities such as tungsten-steel demonstrated. Experimentation like this has, in the world's history of industrial advance, time and again brought, almost as by chance, some of the greatest achievements of science. The industry of the coal-tar dyes was discovered by an English chemist while experimenting for the production of quinine. A great German concern made the discovery that produced artificial indigo with commercial economies, after steady experimentation costing nearly \$3,000,000, through the accidental breaking of a thermometer. It is said that the use of the indispensable insulating oils of high-tension electric transformers came from research in the laboratories of our great oil producer. Experimentation in the laboratories of one of the electric companies brought about the commercial manufacture of artificial gems for watch making in this country, making good cheap watches possible. The large-scale research laboratory has brought large-scale discovery and invention.

Organized Research Work

In this country it is not only the big corporation that does this research work. Within the past few years a number of our universities have established the practice of inviting manufacturers to employ post-graduate students in special research, offering the use of laboratory equipment for the purpose.

As notable a feature of the development of intellectual efficiency in American business as that of organized scientific research has been the establishment of a whole special curriculum of business science in connection with other courses of higher education in leading universities over the country. Economics has been made a practical science, applicable to executive management of large business affairs. Current analysis of the statistics of business conditions as a help in planning for the future, the economics of production and marketing, the psychology of advertising and salesmanship, the executive handling of men, business organization, the chief phases of banking, corporation finance, investment and speculation, transportation, and other specific activities connected with executive management are a part of these courses, so that men who take them up in earnest leave college with a more or less practical conception of the broad principles of modern business done in a big way.

There are excellent facilities that business men already in active life are taking advantage of by the thousands, in the past few years, particularly in regard to sales-management, study of the possibility of markets, commercial engineering, scientific management, cost accounting system, etc., and there is an excellent current literature of wide circulation to distribute new ideas throughout the business community. The Federal Trade Commission is just beginning a series of national surveys along these lines, and will in the future be a source of scientific information about industrial economics, analogous to the work of the Department of Agriculture, the Bureau of Mines, the Bureau of Standards, and other Government means for nation-wide dissemination of knowledge helpful to national production.

Bringing the College and Business Together

It has been a remarkable fact of a few recent years how many of America's leading men of business were writing and speaking on the practical, up-to-date economics of present-day business, and how, from the direction of the colleges, leading men of the chairs of economics were getting into closer touch with the real conduct of affairs. There has been a closer and

closer approach to direct co-operation of business organizations and the colleges for the purpose of making the courses of training in the latter practical means of preparation for capable work in business organization. This has grown out of the close personal interest of individual men of affairs in such developments. This year has seen the accomplishment of the first formal arrangement on an extensive scale for definite co-operation between leading colleges that have established effective courses in the science of business and the most important commercial and financial concerns in the country that are in the market for capable raw material for recruiting their executive forces.

A year ago the National City Bank of New York, which already had a system of classes in languages, practical banking, stenography and mathematics for its working forces, began the reorganization of this course of study so as to include courses of more thorough and extensive training in foreign exchange, mercantile credits, commercial geography, statistics of international trade, practical banking, etc., in which executive officers of the bank co-operate with professional instructors through lectures, moving-picture exhibits, and the like; and twenty young men picked from a large number of candidates who came as graduates from the commercial departments of colleges were taken in at a salary of \$50 a month under an arrangement by which they were to devote part of their time to the routine work of banking, rotating from one department to another, and part to the educational work of the course, as students in training for positions of responsibility in foreign branch-bank work.

How the Plan Has Developed

The college men made a good accounting for themselves. They formed a club-home and on their own initiative held a "round table" every night in which they compared notes of the day's experiences and so made available for all what they learned individually, the information seasoned up by talking it all over and exchanging opinion about it. At luncheon, in the bank, they were formed in language groups, and nothing but French, Spanish or Portuguese was spoken during the meal. The advance of the group was rapid, and individual members have gone to Argentina, Brazil, London, Spain and China on the bank's business.

Members of the group helped hammer out additions and improvements in the courses of study, and early this year a well-planned proposition was submitted by the officers of the bank to

colleges of the country for a formal arrangement by which students of special attainments taking the college courses in economics and commerce spend a part of their college time and vacations in the educational courses of the bank, receiving from an increasing number of the universities credit toward their degree for this practical-study work and receiving from the bank a stipend sufficient to support them. It is understood that these men shall enter the bank's service upon graduation. After negotiation and conferences this proposition was accepted in general terms by the following universities:

Harvard	University of Illinois
Yale	University of Michigan
Princeton	University of Wisconsin
Columbia	University of Minnesota
New York	Chicago University
Cornell	Northwestern University
University of Pennsylvania	Brown
Tulane	Pittsburgh

Sixty-seven other universities and colleges have asked the bank to be included in the system, and whereas it was at the beginning expected that only two or three candidates from each institution would apply to enter the course, 100 from the above list and over 350 from outside colleges have applied. A class of 40 men will enter at commencement time. The problem now is to find a way of including more colleges and utilizing the material they offer.

Since the plan was given public announcement banking institutions in other parts of the country have made similar arrangements, and a tentative scheme for bringing a number of large industrial and other corporations into the bank's agreement has developed; so that it is very likely that within a short time young men preparing in the colleges will spend some time in the practical activities of manufacturing and trading organizations as well as in the bank, and thus round out even better their "laboratory" experiences in business science. In addition, the text-books, etc., used in the bank, will be made available for use in supplementary work in the colleges, and even a "university extension" idea of spreading the benefits of the plan to other concerns requiring broadly trained men is in contemplation.

Systems in Other Countries

To appreciate the full significance of this most recent development in the co-ordination of educational forces for more

efficient American commerce one must know something of the "apprenticeship system" by which English and German merchant and banking houses recruit their executive staffs for engaging in international commerce. For centuries it has been the practice to take the sons of the heads and other executives in these concerns, after their education in college is finished, and send them off to foreign branch offices, or into the establishments of friendly houses in other countries, for practical experience in the ways of trade. Every great house in London and Hamburg has its quota of young men going through various departments in order to learn the machinery, methods and atmosphere of world-commerce, as well as the particular local system. England, in its schools of commerce at Birmingham, Leeds, Liverpool, Manchester and London, has developed training for foreign trade open to all comers. Germany also trains technically for foreign and home commercial careers, graduates finding places at small wages in the houses of Hamburg, Bremen and Liverpool in order to acquire practical experience, supplementing this later by also finding unremunerative employment in foreign countries, "cashing in" upon this later. The men who plan German and English trade campaigns, the men whom they send out as specialists in the survey and estimation of new markets, and the salesmen, are all graduates of this system.

In this country we are just coming into extensive direct international banking relationships, and our foreign commerce is expanding so rapidly that the supply of men trained by experience is entirely inadequate.

In our case, as in Europe's, doing international business requires a broadening of the educational facilities useful in established domestic activities. That is, the successful man in world-trade must be an accomplished man of domestic affairs, plus. Better still, the man of success in local business will hereafter probably need something of the world outlook.

DEMAND IS FOR THE TRAINED MAN

When a corporation has a post to fill it seeks for the place a trained man. The applicant for the job who has only his honesty to recommend him will not go far. Honesty is taken as a matter of course. With it must go training. The man must not only be trustworthy. He must be efficient as well.—*Chicago Tribune.*

PART-TIME CO-OPERATIVE WORK IN NEW YORK CITY**Some of the Problems That Have Been Met and How These Problems Have Been Solved**

In every city where co-operative work has been established in the high schools, the request for such work has generally come from business men to the school and a period of at least a year has been spent in preparation. In New York City plans for co-operative work were talked of in the fall of 1914, and in order that the plan might be put into operation at the beginning of the school term in February, 1915, which was only a few months away, preliminary work was begun at once. In all new work, particularly along educational lines, difficulties are sure to present themselves at the beginning and this has been the case in starting co-operative work in New York City. Conditions at the start were markedly unfavorable in many respects, especially as to the very short time given for preparation and the financial depression so prevalent at that time. While in most cases no definite solution of the problems that have arisen has been reached, yet some progress has been made and the experience gained may be of value to others who are working along similar lines.

Problems in the Industry

On the side of the industry, the foremost question has been the difficulty of arranging progressive work. Two attempts have been made by the co-ordinators to overcome this difficulty. The first plan followed was for the co-ordinator to make several visits to the co-operating company and from personal inspection of the business, talks with superintendents, foremen and other employes, to gain a knowledge of the organization of the business. From the information gathered in this way an analysis of the business was made and a chart of progression worked out according to the ideas of the co-ordinator. While this method seemed to be fairly satisfactory at first, experience has shown that in spite of the good intentions of the co-ordinator, there was unconsciously projected into the chart a little too much of the schoolmaster. The result was an outline with academic tendencies, the carrying out of which proved to be an entirely different matter than had been anticipated. Little progress was made in this way.

Realizing the apparent futility of continuing this process

some of the co-ordinators began to work from the other side. The method of procedure was to let the pupils begin work as opportunity offered in the industry and to accept whatever progression happened to be available at the time in that particular business. In nearly every case someone connected with the company co-operating, has caught the spirit of the kind of training that ought to be given to the boy or girl, and his interest in the problem has been aroused to the point of offering suggestions to the co-ordinator. It is only a short step from offering suggestions, to working with the co-ordinator and making out a plan of progression in the company. The result has been in every case a chart of progression possessing the reality of actual business conditions, such as could be made only by one thoroughly trained in the business under consideration. Needless to say, these outlines of progression have in every case proved to be workable ones.

Another difficulty which at first appeared to be of considerable importance to the business man, was the alternate-week plan. It was hard to see how any person could fill a position and be away from it during every other week. Then, too, the filling of the position by an alternate during the other week meant to the business man that another person must be trained for a place which was already covered. There was the fear that the weekly change in employees would be as bad as hiring a new employee every week. To overcome the trouble, arrangements were made to have the second pupil get into touch with the work of the first pupil on Saturday morning, so as to be able to begin on Monday, where the other left off. A few weeks of alternation showed that the change from one pupil to the other was made without the slightest difficulty, and in most cases, even the Saturday arrangement became unnecessary in a very short time.

In a few cases the question of handling the pay roll has arisen. To have an employee absent consistently for every other week was a condition which had potential horrors for the routine of any methodical bookkeeper. One firm arranged to keep the names continuously on its pay rolls by paying every week one-half of the amount due; another firm arranged that the pay day for each pupil should come during the week that the pupil was in school so as to keep him in touch with the company; others kept names on the payrolls continuously and merely entered the pay for the time working. Bookkeepers soon discovered that it is no harder to keep track of the earnings of an individual by alternate weeks than it is by successive days.

Attitude of Business Men

That most of the difficulties in the industry have really been minor ones and easily overcome, is shown by the fact that there has been a decided change in the attitude of employers during the past year. At first all of the work of securing co-operation fell on the co-ordinator. He was obliged to make, in most cases, many calls upon a business house before the heads of the firm could be brought to the point of deciding to give the co-operative plan a trial. Success in co-operation with one company has awakened the interest of other companies. It is becoming no longer necessary to solicit co-operation, as many business houses, of their own accord, are now making inquiries about the plan and in some cases they are even requesting that pupils be sent to them.

School Problems

On the school side the chief trouble has been in securing teachers to give the proper kind of instruction. With a sympathetic attitude toward the work and the best of intentions and an honest effort to do the right thing, the average school teacher falls short of making the school instruction what it should be for co-operative pupils. Much of this instruction still bears the stamp of the school rather than the more practical marks of real business, and there is much to be done along this line. Progress has been made in the right direction in some cases, by the co-ordinator taking the classroom teacher with him on some of his visits to the shops. The result has been an awakening of the teacher to a realization of the practical work to be done and he has returned to his classroom with an entirely different attitude toward his teaching.

School administrative problems have also been prominent. The general high school is organized on the basis of the class as a unit, while co-operative education, to be effective, must be largely individual in its character. Where the number of pupils in the same line of work has been large enough to form a separate section, the question of fitting this section into the regular school program has been a comparatively simple one. It is the small group of two to six individuals which upsets the regular program of the school. As the number of co-operative pupils in a separate group must always be one-half of the number taking that particular work (since the other half is at work in the industry), the question of small groupings arises frequently. The only possible solution of these problems seems to be in

having a very flexible organization like that of the vocational school, which will allow individual instruction to a great extent. As a makeshift in this matter, the following arrangement has been tried with varying success: Pupils have cut their school programs to about two-thirds the regular requirement and have then attempted to carry the work in the regular classes in the school by arranging with the teacher of those classes to make up work lost during the week of being out in the industry. Although this arrangement is hard on teacher and pupil alike, yet surprisingly good results have been obtained in spite of the difficulties attendant upon such a situation. The week of work in the industry has served as a stimulus to good school work and pupils have returned to school with a zeal and interest in their work so that they have accomplished more in a given time than their companions, who have been in school all the time. The actual work covered in a term has apparently not suffered to any appreciable extent. Examinations have shown as high a grade for co-operative pupils as for the others. As one teacher has expressed it, "The co-operative pupils seem to know what they are after, and they get it." Although it may be rank heresy even to suggest such a thought, yet some of us are bold enough to say that there is a growing conviction that many things in our school text-books, as far as practical life is concerned, might just as well be left out.

Another real difficulty on the school side, and perhaps the most serious one as far as the co-operative course is concerned, is the diffidence displayed by pupils about entering the course. This is especially marked in the case of industrial work. There seems to be a feeling among the boys and girls in high schools, which is no doubt a reflection of the attitude of mind of their parents, that office or clerical work is to be preferred to any form of manual labor or machine work. When necessity calls for the children of the family to become wage earners, parents are prone to choose an occupation for their children where they can be well dressed. False pride often gives parents an aversion to letting their children work at all, and so they are kept in school, taking courses that lead nowhere in particular, striving to create an appearance of opulence while the purse at home is drained in order to supply even the necessities of life. Parents must be brought to a realization of the truth that honest labor is dignified and that no boy or girl need be ashamed to perform an honest task, even though its performance may call for working clothes. Boys and girls must be taught to look at the op-

portunities offered in any line of work, rather than at the initial wage to be received. Co-ordinators have been particularly careful in the kind of work that they have chosen for pupils in the co-operative course. Blind-alley occupations have been carefully avoided and no places have been accepted that do not offer life employment at a reasonable living wage. If a realization that the co-ordinator can do much to place their children in good occupations is brought home to the parents and they are thereby induced to let their children begin work in the co-operative course, the co-ordinator will be relieved of the necessity of urging pupils to enter on a line of work which is sure to result in advantage to them.

Division of Work

There has been some attempt at division of the kind of work any school would do. It was to be expected that a school equipped for manual training would enter the manufacturing field, while a school with commercial courses would be attracted by the possibilities in the clerical or mercantile field. This division of work has become more marked as the work has progressed. At the present time co-operative work in the high schools is distributed in the following way:

	<i>Boys</i>	<i>Girls</i>	<i>Firms</i>
Apprentice or manufacturing.....	103	69	44
Office work	54	109	33
Transportation	12	—	1
Marketing or salesmanship.....	24	44	12

The total number of boys in the course is 193 and the total number of girls is 222, making the number of girls slightly in excess of the number of boys. In apprentice work there were 103 boys against 54 boys in office work, while the girls' conditions are reversed, standing 69 in apprentice work and 109 in office work. In marketing and salesmanship there are about twice as many girls as boys. The total number of different co-operative firms is 85 and the last total weekly payroll of pupils actually at work is \$1,067.80.

Conclusions

Experience of a year shows that employers are willing to adopt the plan of having pupils work by alternate periods and that this plan may be applied not only to industrial establishments, but also to the business office and salesroom. Desirable, prominent business opportunities are opened to the boys and girls,

many of these openings being such as would not be available for graduates of the regular courses in the high schools. On the side of the school it has been shown that programs can be arranged to provide for the work and that the time spent in the industry does not necessarily prolong the period of the high school course, if a wise choice of studies is made. In general, it has been shown that the co-operative pupil becomes keener and more alert because of his actual contact with real business conditions. Incidentally, quite a number of high school pupils who, on account of financial reasons would otherwise have been obliged to leave school, have been enabled to remain in school and finish the course.

Co-operative work in the high schools of New York City has not been carried on long enough or widely enough to learn its possibilities or to predict its future. The growth from the beginning has been gradual but sure, and the outlook for the future is certainly very promising.

R. WESLEY BURNHAM, *Co-ordinator.*

COMMUNITY CENTERS IMPORTANT IN SCHOOL DEVELOPMENT

(Louisville, Ky., Times)

Throughout the country the organization of schools into community centers has been found to be one of the most important factors in the development of the public school system, and in the local schools, where it has been tried most successfully, some interesting clubs and classes have been organized. At the George H. Morris School, from the First B class up through the Eighth grade, every pupil is part of the school organization, and the classes are presided over by a president, vice-president and other officers. At the weekly assemblies the programs are arranged by members of one of the grades who carry out every part without assistance from the principal or faculty. Civics usually is discussed and at the invitation of the class having charge of the program a speaker addresses the school. In addition to the programs prepared the officers conduct recitations if called upon and exercise unusual individuality and leadership when they are directing the class. Medical inspection in the schools has been generally discussed in the programs presented recently and the study of civics has been included in the studies of some of the advanced classes. In the

First B class hygiene and sanitation has been taken up in a practical way, and the younger children have selected their class officers with as much interest as the older pupils. The Executive Committee of the school is composed of the officers of the various classes, and meetings are held after school hours. Matters of interest to the school are discussed and reports are made at the class meetings.

TO RID NEW YORK CITY OF WEAK TEACHERS

Board of Education Adopts Resolution Providing for a General Investigation Which Aims at Efficiency in Teaching

Abraham Flexner, at a meeting of the Board of Education of New York city, recently offered a resolution, which was adopted, asking Acting City Superintendent Straubenmüller to inform the board whether there are among the 21,000 public school teachers any who fall below the reasonable standard of their profession and to state what procedure should be taken to get rid of these inefficient teachers and principals.

The resolution is due to complaints which have been received from time to time that, although the great majority of the teachers are capable and faithful, there are a certain number who, for one reason or another, are unfitted for the positions they fill. Cases have been reported of principals who have teachers under them who do not perform the duties required of them. The things complained of have been going on for so long a time that the principal, in a sort of way, is accustomed to the negligence and tries to have his work done as well as possible in the circumstances.

There are teachers who are inefficient because they have been in service for so many years that they are no longer able to meet the demands made upon them. They ought to be retired, it is said, but the retirement fund has been in such bad shape that they have been kept on duty until the pension fund was in a better condition. There are other teachers who do not come up to the present-day standards. They received their appointments before the present system of examinations went into effect; other teachers are neglectful of their duties. They do not perform the tasks set for them.

The inquiry will be a broad one. The Superintendent will receive reports from the principals of all the schools and from the district Superintendents and other officials.

"That there are incompetent teachers and principals is a fact," Dr. Flexner said. "This is eminently unfair to those who are fully efficient and fulfill the standard of this board. It is also detrimental to the Board of Education and to the whole educational system. I believe they should be discovered and eliminated."

MAKING BETTER WORKMEN

(Pittsburgh, Pa., Times)

Not only a practical idea, but an admirable spirit as well, is embodied in the work of the Association of Corporation Schools now in session in Pittsburgh. The essence of the movement is the making at once of better workmen and better men, and in so doing the employers necessarily make for the betterment of their own business. There is no longer doubt in the minds of thinking men, whether employers or employes, that their interests are identical; that their welfare depends on the same conditions. Efficiency is the keynote of the system evolved and it is attained through a course of vocational education along lines so broad and comprehensive as not only to fit the men to render improved service to their employers, but to equip them to conduct their own affairs more capably, thus advancing their interests both in and out of the shop.

The net result is the drawing together in closer bonds of mutual understanding and good will the two great parties in the field of modern industry, with the consequent elimination of labor troubles and their disastrous train of resultant evils. The effect is very largely the substitution of co-operation for opposition. Instead of the old practice of giving one another the least possible and exacting from one another the most obtainable, the condition toward which the new system tends is one in which both master and man tender the best they have to offer in the knowledge that what is beneficial to either is to the advantage of both. Pittsburgh is fortunate to be the scene of the deliberations of this body, especially at the present period of high pressure in industrial lines. There should be much of an enlightening and widely beneficial character as fruits of the gathering.

CANADA TO EDUCATE RETURNED SOLDIERS

Through the technical schools of the Dominion Dr. A. C. McKay, one of the foremost authorities on industrial education,

expects Canadian industry to be rehabilitated at the close of the war. With a comprehensive plan of government supervision over the returned soldiers, and with the government giving financial aid to every man who needs it, Dr. McKay believes many soldiers will be able to hold better positions after peace comes than they could have held before the war.

"First in value to the industrial worker are the technical high schools," says Dr. McKay. "It is up to the country to give help to every returned soldier who needs it. For our part, we in the schools are ready to give instruction in any industry represented in the industrial life of the Dominion. The schools can accommodate thousands of returned soldiers. I anticipate a great demand for the short courses."

PART-TIME VOCATIONAL WORK SUCCEEDS WITH YOUNG GIRLS

North Bennet Street Industrial School, Boston, Combined Academic and Shop Work—Demand for Workers Exceeded Number of Pupils

The North Bennet Street Industrial School of Boston this past year took a number of girls who were planning to go to work before they had received a training that would fit them for any special line of skilled labor and placed them in part-time classes where the classroom instruction was combined with actual shop work, for which they were paid. The results of this experiment have proved very gratifying, says the *Boston Advertiser*.

It was found that many of the girls in the section surrounding the Industrial School were going out to work as soon as the compulsory school attendance laws would permit them. In the vast majority of cases these girls were not prepared for any special line of work, with the result that they had to enter employment in the very lowest paid positions and the frequency with which they changed positions was high.

Some had to leave school, to be sure, on account of economic conditions at home. Others, however, were actuated more with the desire to earn a little spending money. To keep these girls in school longer and at the same time provide them with the means of earning some money was the task which the Industrial School set for itself.

The school authorities first set out to see what positions were available for which the girls might be prepared and to what

extent the co-operation of employers might be secured. It was learned that there was a demand for girls skilled in power-machine operations.

A small class of girls averaging about 15 years of age were selected and persuaded to take the prescribed course. In the morning hours their academic work was continued, including arithmetic, reading, writing, some history or civics, measuring of material, oral composition, letter writing, which included a drill in writing letters asking for employment, the dangers incident to working with shop hygiene and self-protection from the dangers incident to working with machinery. Recreation was not neglected, and the principal form of amusement and recreation was folk-dancing.

At 1 o'clock the girls went into the school shop, where conditions and methods of work were approximated as nearly as possible to those existing in factories and workshops. Until 5:30 they were engaged in this work, making a variety of articles which were sold through the school agencies. Thus it happened that, while the girls were receiving a vocational training, they were also receiving wages for their afternoons' work.

As the girls were practically self-supporting, they took a great interest in their work. Before the end of the year it became apparent that there would be no difficulty in placing these girls in positions where their wages would be much higher and the employment more steady than would have been possible had they gone directly to work without the special training.

The school received nearly three times as many applications as there were girls to meet the demand. One employer went so far as to agree to take one girl in the morning and another in the afternoon, so that two girls were filling one place in his establishment while still attending school.

As an experiment, the work has proved successful. Not counting the wear and tear on equipment, the class has been practically self-supporting as far as the school was concerned. It is possible that if suitable arrangements can be made this fall, the Industrial School will conduct two similar classes, one in the academic work in the morning and in the shop in the afternoon, while the second class will just reverse the order.

HOW TO COMPEL SUCCESS

No matter what business you take up, if you want to succeed, you must do what you have to do a little better than anyone

about you, so that the attention of your superiors will be attracted to you. Simply doing your duty will not do, for everyone is expected to do his duty. You must do more than your duty. You cannot make people believe you are interested in your work if you are not.—*Charles M. Schwab.*

GENERAL EDUCATIONAL NOTES

Dr. P. P. Claxton, United States Commissioner of Education, is directing an educational survey of North Dakota, which is being made under the auspices of the board of regents. Dr. Claxton took charge of the work at the request of the board and is assisted by Dr. E. B. Craighead, formerly president of the University of Montana; Dr. W. T. Bawden, the industrial expert of the bureau of education in Washington, and Dr. L. D. Coffman, of the department of education at the University of Minnesota. Dr. Claxton also is directing an educational survey of the State of Washington.

Vocational education is strictly not transferable. The commodity to be dispensed at Minneapolis cannot be borrowed from another city and the commodity to be dispensed five years from now cannot be borrowed from today. Classes in the high schools are to be formed in reference to specific and immediate needs. These needs and not any fine spun "course of study," are to determine the nature of the work. This is the statement of John N. Greer, principal of Central High School of Minneapolis, recently appointed assistant superintendent to oversee vocational education in the high schools. "Last fall the park board intimated that it would need a group of play assistants for the playgrounds this summer," said Mr. Greer. "We found the group of twenty-two girls who wanted to be trained for this job, we found the group of persons best fitted to train them and then we trained them. They have all passed the civil service examination and there you are. That is vocational education as we mean to practice it in the city high schools."

It is announced that the students in twenty-one colleges and universities, including high schools in New York City, are now competing for the Foreign Trade Council prizes for essays on the American merchant marine. When the council, which is composed of fifty manufacturers, merchants, farmers, railroad and steamship men and bankers, representing all parts of the country and engaged in the economic investigation of foreign trade problems, last year turned its attention to a greater American merchant fleet in the foreign trade it found progress difficult because of "the general lack of knowledge of the fundamentals of ocean transportation." This inspired a member of the council to offer \$1,500 to be distributed in prizes, mostly to institutions in the interior, to promote careful study of the shipping question. In

order that faculty as well as student interests might be stimulated, the contest in each institution, or group of institutions, was arranged under the direction of a Faculty Committee.

Recommending the appointment of an assistant superintendent for vocational education, "with salary sufficient to attract a man of experience and diplomacy"; calling for vocational training along broader lines in the grade and high schools; advising the establishment of a more complete night vocational school, which would be centrally located, and insisting that vocational training be made such a large part of the school curriculum that employers would be attracted and thus provide places for students, the school survey committee which has been studying Denver's needs has turned in its report and findings.

Mayor Mitchel of New York has announced a committee to make an industrial survey for the guidance of the Board of Education in its extension of industrial education.

Miss Orie L. Hatcher, head of the Virginia bureau of vocations for women, announces plans for the organization's work during the coming twelve months. Plans have been decided upon for extending the bureau's work to various cities and towns in the state. A lyceum course for vocational training is to be given. The board also decided to select a college graduate for apprentice work.

Raymond G. Fuller, Director of the Secretarial Department of the new Russel Sage College at Troy, N. Y., said, recently, that the preliminary work of organization is already well advanced and that the department will be able to offer in 1916-1917 not only the first-year work in both the four-year and the two-year course but also a large amount of advanced work in purely secretarial subjects as well as English, modern languages and science. "We are to have," he said, "a college of a new kind—one that gives a college education while preparing for a vocation, or, to put it the other way around, one that prepares for a vocation while giving a college education. Both technical and cultural subjects will be taught, though the distinction is sometimes hard to discover. A good general education in addition to technical training is regarded nowadays as of great importance in secretarial work, especially so far as the more responsible and higher paid positions are concerned and in regard also to rapidity of advancement."

One of the most notable charities since the beginning of the war is the gift of approximately \$5,000,000 by Frau Irma Kraill, of Budapest, who died recently, for the education of the common people.

Declaring that railroad life is no longer attracting the high type of men that develop into capable superintendents, traffic

managers and presidents, John J. McInerney, of Rochester, N. Y., general counsel of the New York State Motor Federation, advocated in an address before the Central Railway Club of Buffalo that there be established a great training college for railroad men in this country and that the universities add departments of railroading.

An entirely new idea in education and in school finances is being worked out in the New York State School of Agriculture on Long Island. Instead of opening the school in late September and closing it in mid-June, the trustees made the school year begin on March 1st, the sessions to continue uninterruptedly through the twelve months, with only such vacations as employes of business houses have, and these vacations to be taken in winter.

In a recent address, Prof. Paul H. Hanus, for twenty-five years a professor in Harvard University, said: "Twenty-five years ago no one thought of a scientific study of education. Today we are unwilling to use mere opinions as a basis in educational work."

The School Board of New Orleans will consider the construction of a commercial high school to relieve congested conditions in the three high schools where shorthand, typewriting and commercial bookkeeping is now being taught. This branch of the school work, according to Superintendent Gwinn, is increasing so rapidly that the need of a high school devoted exclusively to commercial work is becoming more pronounced each day.

That a more extended course in manual training in the public schools of Jersey City, N. J., would be a benefit to the students and incidentally to the manufacturers was intimated by F. L. Groff, president of the Mersereau Metal Bed Company, in an address before the Board of Directors of the Jersey City Chamber of Commerce recently. Mr. Groff said that under present conditions young men were compelled to lose from two to four years' time after leaving school before they were fitted to earn a living wage in any manufacturing plant.

The Massachusetts Institute of Technology celebrated its fiftieth anniversary by dedicating and formally opening its new \$9,000,000 home on the Cambridge shore of the River Charles.

Next fall will see the introduction of the junior high school in at least thirteen of the New York City schools. The foremost educators in the country are advocating this change in the secondary school system. They believe it will make better provision for individual differences, render the transition to the high school

easier, decrease the number of pupils eliminated from the school system and furnish an opportunity for various reforms in instruction. The numerous cases of retardation and elimination in schools throughout the country have been a source of grave concern to authorities in the educational field.

"The Du Pone Night Trade School, Louisville's opening gun in the war against stagnation through efficiency," says the Louisville, Ky., *Courier-Journal*, "is being patronized by messenger boys, automobile mechanics, tailors, machine shop apprentices, clerks, 'handy men,' office boys, pharmacy clerks, grocery clerks, tanners, bundle boys, wrappers, plasterers, cable-splicers, sawyers, carpenters, unskilled laborers, shoemakers, book-keepers, butchers, stenographers and followers of many other means of livelihood, to whom it offers a new and alluring opportunity.

The largest attendance in its history was registered by the Kentucky Educational Association during the four days of its annual meeting. Among the recommendations contained in the report of the Committee on Resolutions are that consolidated country schools be established in all counties as rapidly as possible and that agricultural high schools be established in each county.

The business school graduates of Harvard received over twice as much in the way of remuneration as the graduates of the law and medical schools during the year after graduation. But for the next three or four years, the medico and the young lawyer increased their incomes much faster than the business graduate, and after five years, the lawyer leads, with the doctor somewhat behind, while the business graduate is finding it hard to increase his income. This phase of college education is shown by figures compiled at Harvard from information furnished by graduates. The lawyer earns \$664 the first year out, on the average, and the physician \$623. The business school graduate jumps into positions averaging \$1,450, the very first year. About the third year, they are practically evened up.

"The State of Georgia and the South would solve 90 per cent. of the race problem and save a large per cent. of the colored youth from growing up in ignorance and crime, if it would make it a law that no colored teacher would be allowed to teach in the public schools who has not received an industrial training, because 99 per cent. of the colored children who attend school in the cities and rural districts will make their living—with their hands," declared Professor B. R. Holmes, president of the Holmes Institute, in a recent address.

Aiming to educate young girls in a line of vocational work which will fit them for life's battles, the Girls' Protective League has opened a school in Detroit where equipment has been in-

stalled and teachers established who will instruct applicants in domestic work, fitting them for cooks, waitresses and housemaids. The service is free.

A plan for vocational guidance has been outlined by Dr. David Snedden, retiring commissioner of education of Massachusetts. "School teaching," he said, "is generally thought a humdrum occupation. I wonder how many young men realize that the man who goes into it will be getting greater financial returns in five to ten years than the man who goes into law or medicine. It is the pinnacles to which the few may rise that attract the young men to the other professions. Girls have no idea how paltry are the returns for the average of them on the stage, and how few of those who rise, though those who do succeed reach marvelous heights. There are probably ten times as many young women in the United States who are thinking of being artists and spending money training themselves to be than will have the slightest chance to succeed as such. Vocational guidance with no opportunity for vocational training, is, of course, like 'Hamlet,' with Hamlet left out. We no longer train bank presidents by the office-boy route. The further development of vocational schools should, therefore, be encouraged."

Chicago is about to have a vocational survey. This is urgently needed, says the *Chicago Herald*. The schools must be investigated to see how well they train boys and girls for the jobs awaiting them, and industry must be investigated. Plainly, it would be worse than wasteful to teach a boy a trade at which he could not possibly earn a decent living.

Randolph County, Indiana, has 20 consolidated schools, 14 of which have four-year high school courses and one a two-year high school course. Eight years ago the county had one commissioned high school attended by 61 pupils; this year it has 13 commissioned schools attended by over 600 pupils. For eight years before consolidation, from 21 to 50 per cent. of eighth-year pupils entered high school; since that time over 93 per cent. entered high school. Two hundred and thirty of the 242 of last year's eighth grade graduates are in high school this year. Over 70 per cent. of those who entered high school four years ago completed the course. This county has abandoned 96 one-room schools and consolidated them. Not one of these schools has been reopened, although 76 of them have been abandoned by petition of the patrons, and could be reopened by the same method.

Utica, New York, has a training school for firemen. The public is invited to see the men practice all kinds of rescue work such as scaling walls, leaping into life nets and holding life nets for others to leap into. Firemen will also be given a chance to carry persons down ladders. One man from each company is

sent to the training school each afternoon. The new men go there for a week, but the others attend three days.

A public conference on the question of vocational training in the public schools of Baltimore was recently held at the suggestion of the Merchants and Manufacturers' Association and the Baltimore Federation of Labor. It is the aim of those interested in vocational training to so change the curriculum in the schools of that city as to prepare the boys and girls for the various pursuits to their liking. It is proposed to teach them the various trades so that they will be enabled to acquire the skill necessary to give them a higher standing as tradesmen.

A boys' and girls' department is to be a feature of the New York State Fair at Syracuse this year. Products raised by the boys and girls, or useful articles made by them, may be exhibited in competition for prizes which the State Fair Commission will offer. Exhibits by children in the elementary schools will constitute one section, and exhibits by children in the high schools will make up another. The best ten ears of Dent corn exhibited by a boy or girl in an elementary school will bring an award of \$8. The second prize will be \$5 and the third \$2. There will be five additional prizes of \$1 each. All articles exhibited must be made or produced by the boy or girl exhibitor, and statements from the teacher, or parent or guardian, so certifying, will be required. Similar prizes will be given for potatoes raised by the children, and for apples, vegetables and fruits.

Discussion and development of definite plans for assisting and teaching communities of the South how to work, study and play, participated in by southern leaders, featured the various group and general sessions of the Southern Conference for Education and Industry held at New Orleans. Experts in agriculture, manufacturing, education, social, church and civic work from all over the country added their suggestions to those of southern men and women seeking to further the announced purposes of the conference—to train for better citizenship and develop the section's resources.

Superintendent Chadsey of the Detroit Public Schools, upon returning from a junket of a committee which visited eastern cities to get information for the equipment of the annex to the Cass Technical School of that city, is more thoroughly imbued than ever with the opinion that Detroit is far behind the other cities of the United States and of Canada in provision for technical education in public schools. "It seems deplorable that we cannot do as much for technical education as cities of lesser industrial importance," he complains. "It is true that the original outlay is great, but other cities are getting much of their original investment back, for the students make much of the school furniture and fixtures; their own lathes, presses and other ma-

chinery; furniture and apparatus of all kinds for city offices, and even a surplus that is sold.

New quarters for the College of Business Administration of Boston University have been secured in the Boylston Chambers on Boylston Street, according to an announcement recently made by Dean Everett W. Lord. The quarters will be used only for a year, however, after which it is planned to erect a new building for the department. The new courses prepare directly for accountancy, advertising, salesmanship and other practical business.

A plan for increasing vocational training in Albany, New York, schools has been adopted by the board of education. It will be put into effect at the opening of school in the fall. The plan means that vocational training is now available to pupils in the seventh and eighth grades, some 1,800 boys and girls.

Education is necessary to modern success. The knowledge which experience itself imparts is too limited and comes too late in life to be considered a real foundation for true success.

The Fort Wayne, Indiana, City School Board has closed a lease for a large unoccupied factory building here, in which the vocational department of the public schools will be installed. It will be prepared at once for occupancy by the students.

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